

Proteus® 5.1.0

For the LFA 427, LFA 447 und LFA 457

NETZSCH

SOFTWARE
UPDATE

The fifth generation of the *Proteus*® measurement and analysis software has been released.

Intensive dialogue with users has made it possible to both make detailed improvements to existing functions and implement a series of new ones. The support of many users has played a decisive role

in making *Proteus*® even more user-friendly and effective. *Proteus*® 5.1.0 has undergone not only a facelift for a more modern appearance but also technical improvements including:

- Interactive help for selection of the correct measurement parameters.
- The various evaluation models allow pulse lengths and radial/facial heat losses, for example, to be accounted for simultaneously.
- Ultra-modern evaluation methods allow two- and three-layer systems (liquids, pastes) and contact resistances to be measured and characterized.
- The software is designed with utmost flexibility in mind and is capable either of fully automatic measurement and evaluation or of being manually operated.
- The thermal diffusivity and conductivity as a function of temperature can be depicted simultaneously in a single graph.
- The c_p standard option allows specific heat to be measured using the comparative method with a known standard material.
- An evaluation can be saved and re-started at any given time.
- The user interface is available in English, German, Russian and Chinese.
- *Proteus*® 5.1.0 allows for even more efficient operation of your LFA and for quicker interpretation and easier documentation of the data gleaned.

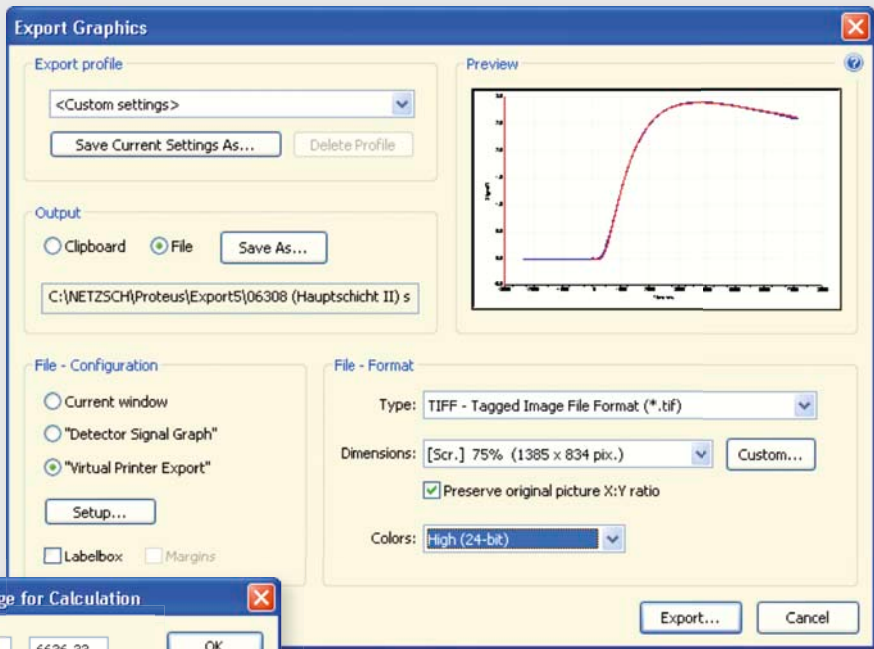
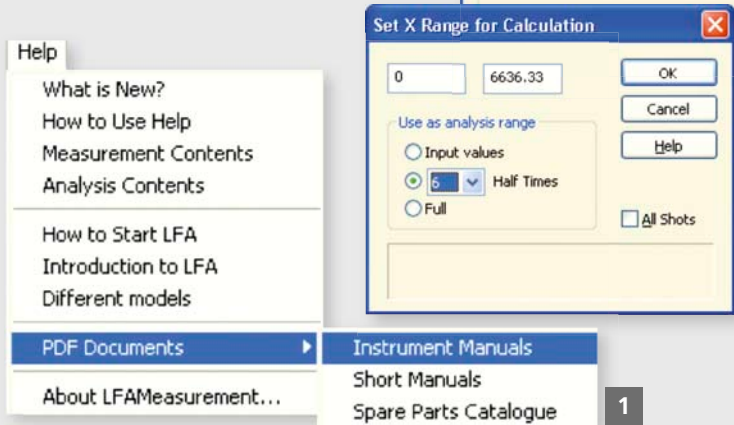
Lfa Controller	
Amplifier Gain	8
Optimize Gain	<input checked="" type="checkbox"/>
HSA Card	
Signal Acq. Duration	420.5 ms
Optimize Duration	<input checked="" type="checkbox"/>
Signal Acq. Points	987
Laser	
Laser Voltage	410 V
Pulse Width	0.50 ms
Lfa Controller Info	
Amplifier ADC	0.00 V
Preamplifier ADC	0.00 V
Baseline Stability Thres.	1.00 V/10s
Baseline Stability	V/10s
Iris Hole	
Temperature Controller Info	
Temp. Stability Thres.	0.30 K/30s
Temp. Stability	K/30s
Temp. Diff. Thres.	3.0 K
Temp. Diff.	K
Sample	
Thickness	1.0000 mm
Diameter	1.0000 mm
<input type="button" value="Help"/>	

Measurement

- Improved optimization of measurement parameters: For critical samples, the function for optimizing the duration of data acquisition can be turned off in order to carry out multiple series of shots at a constant duration.
 - Simplified operation of the "Automatic Mode": The function for optimizing the amplification or duration of data acquisition can be activated or deactivated directly in the parameter window.
 - Improved monitoring of the operational functions: If nitrogen is lacking in the Dewar of the IR sensor, the measurement / furnace heating is reliably shut down unless nitrogen is replenished within a certain amount of time.
 - Improved routine for optimizing the duration of data acquisition when radiation spikes occur.
 - Simplified programming of laser parameters for individual shots.
- 1** Direct access to operating manuals, guides and spare parts catalogs in PDF format.

Analysis

- The output of tables and graphs is centralized under the main menu point 'Output'.
 - Output of the measurement data, parameters and results either to the printer or as a PDF or ASCII file.
- 2** The evaluation graphs can be copied to the clipboard or saved as a file in JPG, TIF, PNG, BMP or EMF format.
- The maximum number of loadable series of shots has been increased from 6 to 32.
- Export of approximated data.
 - For better identification of series of shots, the label box under the measurement curves has been expanded to include curve legend symbols.
 - Quicker import of LFA 447 measurement files through simultaneous selection of multiple files.
- 3** During manual evaluation of detector signals, numerical values can be set manually or as multiples of half-time.



NETZSCH-Gerätebau GmbH
 Wittelsbacherstraße 42
 95100 Selb, Germany
 Tel.: +49 9287 881-0
 Fax: +49 9287 881-505
 at@netsch.com